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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/614,339

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Clement Robertson

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7869

24504

7590

03/18/2008

THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP  
600 GALLERIA PARKWAY, S.E.  
STE 1500  
ATLANTA, GA 30339-5994

EXAMINER

KANG, SUK JIN

ART UNIT

PAPER NUMBER

2619

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/614,339	<b>Applicant(s)</b> ROBERTSON, CLEMENT	
	<b>Examiner</b> SUK JIN KANG	<b>Art Unit</b> 2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 2,3,13,14,24 and 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-12,15-23 and 26-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. **Claims 1, 4-12, 15-23, and 26-39** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hann et al.** (U.S. Patent # 6,535,520 B1) in view of **Joshi et al.** (U.S. Patent # 6,006,017).

Consider **claims 1, 12, and 23**, Hann et al. discloses a method, system, and computer readable medium comprising instructions for optimizing cell available (CLAV) status polling of a plurality of physical interface (PHY) addresses, the method and system comprising the steps of: polling a plurality of PHY addresses (18 and 22, figure 1) to determine CLAV status (column 4 lines 4-9); receiving the CLAV status for each one of the plurality of PHY addresses (column 4 lines 32-35), but may not expressly

disclose determining whether the CLAV status could change for each PHY address, wherein the CLAV status that could change comprises both an inactive CLAV status and a completed cell transfer; and re-polling only each of the PHY address with the CLAV status that could change.

In the same field of endeavor, Joshi et al. disclose determining whether the CLAV status could change for each PHY address (column 4 lines 41-57, column 7 lines 29-34), wherein the CLAV status that could change comprises both an inactive CLAV status (104, unresponsive state, figure 4) and a completed cell transfer (column 8 lines 23-32); and re-polling only each of the PHY address with the CLAV status that could change (figure 7, column 9 lines 3-16 and 25-38, secondary station changes from unresponsive to active, thus could change).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate re-polling CLAV statuses that could change as taught by Joshi et al. with the method and system as disclosed by Hann et al. for the purpose of efficiently using available bandwidth.

Consider **claims 4, 15, and 26**, and as applied to claims 1, 12, and 23, respectively, Hann et al., as modified by Joshi et al., discloses the claimed invention, but may not expressly disclose re-polling addresses with an inactive CLAV status.

Nonetheless, Joshi et al. further discloses re-polling addresses with an inactive CLAV status (104, unresponsive state, figure 4, column 7 lines 29-34, column 9 lines 3-16 and 25-38).

Consider **claims 5, 16, and 27**, and as applied to claims 1, 12, and 23, respectively, Hann et al., as modified by Joshi et al., discloses the claimed invention, but may not expressly disclose wherein the step of re-polling further comprises the step of: re-polling addresses having completed a cell transfer.

Nonetheless, Joshi et al. further discloses wherein the step of re-polling further comprises the step of: re-polling addresses having completed a cell transfer (column 8 lines 23-32, column 9 lines 3-16 and 25-38).

Consider **claims 7, 18, and 29**, and as applied to claims 1, 12, and 23, respectively, Hann et al., as modified by Joshi et al., discloses wherein the CLAV status comprises ability to receive a cell (column 4 lines 32-34, column 6 lines 6-9).

Consider **claims 8, 19, and 30**, and as applied to claims 7, 18, and 23, respectively, Hann et al., as modified by Joshi et al., discloses wherein a PHY address is re-pollled within at least four bytes of a previous cell transfer (column 4 lines 9-15).

Consider **claims 9, 20, and 31**, and as applied to claims 1, 12, and 23, respectively, Hann et al., as modified by Joshi et al., discloses the claimed invention, but may not expressly disclose wherein the CLAV status comprises the ability to transmit a cell.

Nonetheless, Joshi et al. further discloses wherein the CLAV status comprises the ability to transmit a cell (column 5 lines 39-50).

Consider **claims 10, 21, and 32**, and as applied to claims 1, 12, and 23, respectively, Hann et al., as modified by Joshi et al., discloses the claimed invention,

but may not expressly disclose wherein each PHY address with an inactive CLAV status is re-pollled until the PHY address indicates an active CLAV status.

Nonetheless, Joshi et al. further discloses wherein each PHY address with an inactive CLAV status is re-pollled until the PHY address indicates an active CLAV status (figure 7, column 9 lines 3-16 and 25-38).

Consider **claims 11, 22, and 33**, and as applied to claims 1, 12, and 23, respectively, Hann et al., as modified by Joshi et al., discloses wherein the physical interface is a UTOPIA (column 3 lines 49-51).

Consider **claims 34, 36, and 38**, and as applied to claims 1, 12, and 23, respectively, Hann et al., as modified by Joshi et al., discloses polling a high-speed port more frequently in comparison to a low-speed port (column 7 lines 10-26), but may not expressly disclose wherein the polling of a plurality of PHY addresses to determine CLAV status comprises using a poll ratio.

Nonetheless, Joshi et al. further discloses wherein the polling of a plurality of PHY addresses to determine CLAV status comprises using a poll ratio (column 6 lines 25-31).

Consider **claims 35, 37, and 39**, and as applied to claims 1, 12, and 23, respectively, Hann et al., as modified by Joshi et al., discloses wherein the re-polling step further comprises polling a NULL PHY address when no PHY address has a CLAV status that could change (column 5 lines 17-27).

***Allowable Subject Matter***

3. Claims 6, 17, 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1, 4-12, 15-23, and 26-39 have been considered but are moot in view of the new ground(s) of rejection and are not persuasive.

Consider claims 1, 12, and 23, Applicant argues Joshi fails to disclose "re-polling only each of the PHY address with the CLAV status that could change." Specifically, Applicant argues, "Assuming that the Office Action is alleging that the "SPoll" corresponds to "re-polling," this passage indicates that the SPoll is not a re-poll but rather a confirmation that "the response was received correctly and that the secondary station is now active." Furthermore, the SPoll is not of the PHY address with the CLAV status that could change, but rather the SPoll is a confirmation sent to a second station that it is "now active." In other words, the change to "active" has already occurred once the SPoll is transmitted."

The Examiner respectfully disagrees with Applicant's argument because the SPoll, disclosed by Joshi, is still a subsequent polling following an initial GPoll of a secondary station which has changed from an unresponsive station to an active station. Thus a "re-polling" (SPoll) is performed on a physical interface (secondary station) "that could change" (unresponsive to active). The subsequent SPoll or "re-polling" is only

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performed because the secondary station was initially unresponsive and is *requesting* to become active (column 9 lines 13-16). Therefore, the status of the secondary station is still considered to be unresponsive when the SPoll is performed, and only once the SPoll is received by the secondary station is the status considered to be active (column 9 lines 36-39).

### **Conclusion**

5. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Suk Jin Kang whose telephone number is (571) 270-1771. The examiner can normally be reached on Monday - Friday 8:00-5:00 EST.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

*/Suk Jin Kang/  
Examiner, Art Unit 2619*

March 11, 2008

*/CHAU T. NGUYEN/  
Supervisory Patent Examiner, Art Unit 2619*